

**What the invention claimed is:**

1. A nano photocatalyst coating procedure comprising the steps of:

5 a).applying a nano photocatalyst solution prepared by mixing nano titanium dioxide with zinc oxide in a liquid to form a nano photocatalyst coating at the surface of a workpiece;

b). heating the coating at the workpiece to melt zinc oxide of said nano photocatalyst coating without melting nano titanium dioxide of said nano photocatalyst coating; and

10 c). polishing the coating at the workpiece to press nano titanium dioxide of said nano photocatalyst coating into recesses at the surface of the workpiece and to let nano titanium dioxide of said nano photocatalyst coating be bonded to recesses at the surface of said workpiece by molten zinc oxide.

15 2. The nano photocatalyst coating procedure, wherein said workpiece is a ceramic tile.

3. The nano photocatalyst coating procedure, wherein said workpiece is a glass member.

20 4. The nano photocatalyst coating procedure, wherein said workpiece is a metal plate member.

5. The nano photocatalyst coating procedure, wherein said workpiece is a plastic plate member.